

FY 2012–2016 CIP/COP Project – Kirby Road Water Main Replacement (Chain Bridge to Chesterbrook)

CIP ☒ COP ☐

Department/Division: Environmental Services, Utility Division

Description/Justification:

As part of the Water System Master Plan completed in November 2005, and updated in 2010, the consultant recommended several water main projects to be completed by 2015. The first project is approximately 15,500 feet of 36" water line along Kirby Road from the Chain Bridge Pump Station to the Chesterbrook Pump Station. In order to complete the construction of this project by 2015, the route selection, permitting and engineering began in 2010. These projects are required in order to meet projected future demands.

Project Cost Estimate:

The consultant provided a cost estimate for the overall cost of the project.

Engineering and Design: \$1,050,000
Construction: \$9,150,000
Total Project Cost (all years): \$10,200,000

Prior Appropriations: \$1,600,000
Unexpended Balance: \$1,570,000

Future Funding Needs:

	<u>Prior Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source:Bonds	\$1,600,000	\$1,000,000	\$2,500,000	\$3,000,000	\$2,100,000	\$0	\$10,200,000
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Total:	\$1,600,000	\$1,000,000	\$2,500,000	\$3,000,000	\$2,100,000	\$0	\$10,200,000

Project Schedule:

Engineering and Design: January 2011 to September 2012
Construction: November 2012 to November 2014

Impact on Operating Costs:

There is no impact on operating costs.

Conformity with Comprehensive Plan and Council Strategic Plan:

Improving reliability for the water system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
- Ensure the most efficient and effective management of water systems
- Explore new technology to update and operate the City's utilities system

This project supports the City Council Vision and Strategic Plan as stated in:

- Successful Development, Goal 3: Infrastructure that supports Citywide redevelopment that creates a vibrant, distinct, sustainable, great place.
- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – Kirby Road Water Main Replacement (Chesterbrook to Westmoreland)

CIP X COP _____

Department/Division: Environmental Services/Utility Division

Description/Justification:

As part of the Water System Master Plan completed in November 2005, and updated in 2010, the consultant recommended several water main projects to be completed by 2015. This project consists of 5,700 feet of 36-inch main in Kirby Road from the Chesterbrook Pumping Station to Westmoreland Street. In order to complete the construction of this project by 2015, the engineering will begin in July 2011. This project is required in order to meet projected future demands.

Project Cost Estimate:

The consultant provided a cost estimate for the overall cost of this project

Engineering and Design: \$400,000

Construction: \$3,350,000

Total Project Cost (all years): \$3,750,000

Prior Appropriations:

Unexpended Balance:

Future Funding Needs:

	<u>Prior</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
	<u>Appropriations</u>						
Funding Source: Bonds	\$	\$200,000	\$200,000	\$1,950,000	\$900,000	\$500,000	\$3,750,000
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Total:		\$200,000	\$200,000	\$1,950,000	\$900,000	\$500,000	\$3,750,000

Project Schedule:

Engineering and Design: July 2011 to April 2013

Construction: June 2013 to June 2015

Impact on Operating Costs:

There is no impact on operating costs

Conformity with Comprehensive Plan and Council Strategic Plan:

Improving reliability for the water system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
- Ensure the most efficient and effective management of water systems
- Explore new technology to update and operate the City's utilities system

This project supports the City Council Vision and Strategic Plan as stated in:

- Successful Development, Goal 3: Infrastructure that supports Citywide redevelopment that creates a vibrant, distinct, sustainable, great place.
- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – McLean Pumping Station Improvements

CIP ☒ COP ☐

Department/Division: Environmental Services, Utility Division

Description/Justification:

The McLean Pump Station was constructed in the early 1970s. Some of the equipment in this station is the originally installed equipment. A study to evaluate the structure, mechanical equipment, control, and electrical equipment is needed. Based on this study recommended improvements to the pump station will be designed and implemented. It is likely that at least the power distribution equipment will require replacement. It is quite possible that the station will need to be replaced with a new facility having a greater capacity.

The upgrade of this station to a larger capacity was part of the 2006-2010 CIP, as recommended in the 1997 Water System Comprehensive Plan. The project was removed from the 2007-2011 CIP while the consultant was developing the new Water System Comprehensive Plan. The same consultant has been contracted to update the scope of this project prior to undertaking design, based on changes in forecasted demands. The Tysons redevelopment and the Town of Vienna's decision to purchase all of its water from the City necessitate replacing this station with a new facility.

Project Cost Estimate:

Cost estimate is provided by staff.

Engineering and Design:	\$450,000
Construction:	\$3,750,000
Total Project Cost (all years):	\$4,200,000

Prior Appropriations:	\$2,750,000
Unexpended Balance:	\$2,650,000

Future Funding Needs:

	Prior						
	<u>Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source: Bonds	\$2,750,000	\$450,000	\$900,000	\$100,000	\$0	\$0	\$4,200,000
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Total:	\$2,750,000	\$450,000	\$900,000	\$100,000	\$0	\$0	\$4,200,000

Project Schedule:

Engineering and Design: January 2011 to April 2012
Construction: May 2012 to May 2013

Impact on Operating Costs:

There is no impact on the operating budget.

Conformity with Comprehensive Plan and Council Strategic Plan:

The continued need for maintenance of the water system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
- Ensure the most efficient and effective management of water systems
- Explore new technology to update and operate the City's utilities system

This project supports the City Council Vision and Strategic Plan as stated in:

- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – Water Main Replacement

CIP X COP _____

Department/Division: Environmental Services, Utility Division

Description/Justification:

A systematic approach to water main replacement is being pursued throughout the City's water system. Based on several factors, including main break history, impact to customers, and traffic impacts, an on-going program has been developed. Each year this list is reevaluated and priority replacement projects are selected for construction.

Project Cost Estimate:

The FY 2011 cost estimate is provided by Department staff, based on the annual budget and recent experience in water main installation costs.

Engineering and Design: \$200,000
Construction: \$1,800,000
Total Project Cost (each year): \$2,000,000

Prior Appropriations: \$7,000,000
Unexpended Balance: \$2,000,000

Future Funding Needs:

	<u>Prior Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source:	\$7,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$17,000,000
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Total:	\$7,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$17,000,000

Project Schedule:

Engineering and Design: On-going
Construction: On-going

Impact on Operating Costs:

The impact on the water fund is accounted for in the adopted rate structure.

Conformity with Comprehensive Plan and Council Strategic Plan:

The continued needed maintenance of the water system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
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- Ensure the most efficient and effective management of water systems
- Explore new technology to update and operate the City's utilities system

This project supports the City Council Vision and Strategic Plan as stated in:

- Successful Development, Goal 3: Infrastructure that supports Citywide redevelopment that creates a vibrant, distinct, sustainable, great place.
- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – Dolley Madison to McLean P.S. Water Main

CIP **X** COP _____

Department/Division: Environmental Services, Utility Division

Description/Justification:

As part of the Water System Master Plan completed in November 2005, and updated in 2010, the consultant recommended an additional water main project to be completed before 2015. The project consists of 2,100 feet of proposed 36-inch main in Dolley Madison from Old Dominion Drive to the McLean Pumping Station. This project is required to meet future projected demands. This project location and scope will be re-evaluated upon completion of the preliminary engineering study of the McLean Pump Station, which will be completed in the first half of 2011.

Project Cost Estimate:

The consultant provided a cost estimate for the overall cost of this project.

Engineering and Design: \$200,000
Construction: \$1,200,000
Total Project Cost (all years): \$1,400,000

Prior Appropriations: \$0
Unexpended Balance: \$0

Future Funding Needs:

	<u>Prior</u>						
	<u>Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source: Bonds	\$0	\$0	\$200,000	\$1,200,000	\$0	\$0	\$1,400,000
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Total:	\$0	\$0	\$200,000	\$1,200,000	\$0	\$0	\$1,400,000

Project Schedule:

Engineering and Design: August 2012 to June 2013
Construction: July 2013 to April 2014

Impact on Operating Costs:

There is no impact on operating costs.

Conformity with Comprehensive Plan and Council Strategic Plan:

Improving reliability for the water system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
- Ensure the most efficient and effective management of water systems
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FY 2012–2016 CIP/COP Project – Tysons Tank No. 1 to Tysons Tank No. 2 Water Main

CIP ☒ COP ☐

Department/Division: Environmental Services, Utility Division

Description/Justification:

As part of the Water System Master Plan completed in November 2005, and updated in 2010, the consultant recommended a second water storage tank at Tysons Corner. Along with this new tank approximately 3,800 feet of 16-inch water main will be required to connect the two Tysons area storage tanks. The need for this facility is based on projected future demands in the Tysons Corner and surrounding area.

Project Cost Estimate:

Cost estimate is provided by staff.

Engineering and Design:	\$150,000
Construction:	\$1,175,000
Total Project Cost (all years):	\$1,325,000

Prior Appropriations:

Unexpended Balance:

Future Funding Needs: \$500,000

	<u>Prior Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source: Bonds	\$0	\$0	\$0	\$150,000	\$675,000	\$500,000	\$1,325,000
Funding Source:	\$	\$0	\$	\$	\$	\$	\$
Funding Source:	\$	\$0	\$	\$	\$	\$	\$
Total:	\$0	\$0	\$0	\$150,000	\$675,000	\$500,000	\$1,325,000

Project Schedule:

Engineering and Design: January 2014 to March 2015
Construction: May 2015 to November 2016

Impact on Operating Costs:

There is no impact on the operating budget.

Conformity with Comprehensive Plan and Council Strategic Plan:

The continued need for maintenance of the water system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
- Ensure the most efficient and effective management of water systems
- Explore new technology to update and operate the City's utilities system

This project supports the City Council Vision and Strategic Plan as stated in:

- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – Tysons Tank No. 2

CIP X COP _____

Department/Division: Environmental Services, Utility Division

Description/Justification:

As part of the Water System Master Plan completed in November 2005, and updated in 2010, the consultant recommended a second water storage tank at Tysons Corner. The City owns a site intended for this purpose on Old Courthouse Road which can accommodate the proposed 3 million gallon tank. The need for this facility is based on projected future demands in the Tysons Corner and surrounding area.

Project Cost Estimate:

Cost estimate is provided by staff.

Engineering and Design: \$500,000
Construction: \$5,500,000
Total Project Cost (all years): \$6,000,000

Prior Appropriations:

Unexpended Balance:

Future Funding Needs: \$500,000

	<u>Prior</u>						
	<u>Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source: Bonds	\$0	\$0	\$0	\$100,000	\$400,000	\$5,000,000	\$5,500,000
Funding Source:	\$0	\$0	\$0	\$	\$	\$	\$
Funding Source:	\$0	\$0	\$0	\$	\$	\$	\$
Total:	\$0	\$0	\$0	\$100,000	\$400,000	\$5,000,000	\$5,500,000

Project Schedule:

Engineering and Design: January 2014 to March 2015
Construction: May 2015 to November 2016

Impact on Operating Costs:

There is no impact on the operating budget.

Conformity with Comprehensive Plan and Council Strategic Plan:

The continued need for maintenance of the water system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
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- Explore new technology to update and operate the City's utilities system

This project supports the City Council Vision and Strategic Plan as stated in:

- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – Chain Bridge Pumping Station (to Merchant Lane Water Main)

CIP X COP _____

Department/Division: Environmental Services, Utility Division

Description/Justification:

As part of the Water System Master Plan completed in November 2005, and updated in 2010, the consultant recommended 1,700 feet of new 48-inch water main In Dolley Madison Boulevard from the Chain Bridge P.S. to Merchants Lane. This project will work in tandem with the Kirby Road Water Main Project. The need for this facility is based largely on projected future demands in the Tysons Corner and surrounding area.

Project Cost Estimate:

Cost estimate is provided by staff.

Engineering and Design: \$130,000

Construction: \$1,170,000

Total Project Cost (all years): \$1,300,000

Prior Appropriations:

Unexpended Balance:

Future Funding Needs: \$570,000

	<u>Prior</u>						
	<u>Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source: Bonds	\$0	\$0	\$130,000	\$600,000	\$570,000	\$0	\$1,300,000
Funding Source:	\$0	\$0	\$	\$	\$	\$	\$
Funding Source:	\$0	\$0	\$	\$	\$	\$	\$
Total:	\$0	\$0	\$130,000	\$600,000	\$570,000	\$0	\$1,300,000

Project Schedule:

Engineering and Design: January 2013 to January 2015
Construction: March 2014 to January 2015

Impact on Operating Costs:

There is no impact on the operating budget.

Conformity with Comprehensive Plan and Council Strategic Plan:

The continued need for maintenance of the water system meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
- Ensure the most efficient and effective management of water systems
- Explore new technology to update and operate the City's utilities system

This project supports the City Council Vision and Strategic Plan as stated in:

- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – Fairfax Wastewater Treatment Plant Upgrades – Phase I

CIP X COP _____

Department/Division: Environmental Services, Utility Division

Description/Justification:

The City of Falls Church is a wholesale customer of the Alexandria Wastewater Treatment Plant, along with Fairfax County. Approximately 2/3 (800,000 gallons per average day) of the City's wastewater is discharged to Fairfax County for treatment at the Alexandria Sanitation Authority Wastewater Treatment Plant. The City has 1.0 MGD of capacity at the Alexandria plant. Alexandria upgraded their facilities seven years ago to lower nitrogen levels in their plant effluent. The City entered into an agreement with Fairfax to finance its cost of \$5,005,000 over a period of twenty-five years. This agreement was refinanced in 2005 at a lower rate for the remaining twenty-one years of the debt service. Alexandria's operating permit issued by the Virginia Department of Environmental Quality (DEQ) expired in 2009. New capital projects have resulted due to lower effluent limits.

Project Cost Estimate:

Engineering and Design: Completed
Construction: Completed
Total Project Cost (all years): _____

Prior Appropriations: N/A (Annual debt service budgeted since 2005 for the 21 year period or until 2025)
Unexpended Balance: N/A
Future Funding Needs:

	<u>Prior Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source:	N/A*	\$328,311	\$328,311	\$328,311	\$328,311	\$328,311	\$1,641,555
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Total:	\$	\$328,311	\$328,311	\$328,311	\$328,311	\$328,311	\$1,641,555

*The debt service will be satisfied in 2025.

Project Schedule:

Engineering and Design: Completed
Construction: Completed

Impact on Operating Costs:

The initial impact on the sewer fund was accounted for in the adopted rate structure. However, with increasing capital needs the sewer rates will need to be increased to fund the needed debt service.

Conformity with Comprehensive Plan and Council Strategic Plan:

The upgrade of the Alexandria Wastewater Plant meets the goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
- Ensure the most efficient and effective management of sanitary sewer systems
- Explore new technology to update and operate the City's utilities system

This project supports the City Council Vision and Strategic Plan as stated in:

- Successful Development, Goal 3: Infrastructure that supports Citywide redevelopment that creates a vibrant, distinct, sustainable, great place.
- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – Fairfax Wastewater Treatment Plant Upgrades Phase II

CIP ☒ COP ☐

Department/Division: Environmental Services, Utility Division

Description/Justification:

The City of Falls Church is a wholesale customer of the Alexandria Wastewater Treatment Plant, along with Fairfax County. Alexandria's operating permit issued by the Virginia Department of Environmental Quality (DEQ) expired in 2009. New capital projects will result from lower effluent limits. The City's share of the estimated costs of these improvements is approximately \$3,250,000, beginning in FY 11 and continuing over the next 10 years, including land acquisition costs of \$666,66 in 2010.

Current Sewer Fund revenues are not adequate to pay for these improvements. Debt service is assumed at 5% for 25 years. Debt service in FY 12 is based on \$1,650,000 in bonds to be issued in Spring 2011, which covers projected costs through FY 13. Expenditures in FY 14-FY 16 are shown as actual projected costs plus prior debt service.

Project Cost Estimate:

Project Cost Estimate provided by Fairfax County staff.

The City's share of the upgrades is estimated at \$3,250,000.

Engineering and Design: Underway

Construction: Pending

Total Project Cost (all years): _____

Prior Appropriations: \$95,000

Unexpended Balance: \$95,000

Future Funding Needs: \$1,195,000

	<u>Prior Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source: Bonds	\$95,000	\$115,000	\$115,000	\$220,000	\$180,000	\$215,000	\$940,000
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Total:	\$	\$115,000	\$115,000	\$220,000	\$180,000	\$215,000	\$940,000

*The debt service will continue for 25 years.

Project Schedule:

Engineering and Design: 2009-2012
Construction: 2012-2020

Impact on Operating Costs:

With increasing capital needs the sewer rates will likely need to be increased to fund the needed debt service.

Conformity with Comprehensive Plan and Council Strategic Plan:

The upgrade of the Alexandria Wastewater Plant meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
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- Explore new technology to update and operate the City's utilities system

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- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – Arlington Wastewater Treatment Plant Upgrades

CIP X COP _____

Department/Division: Environmental Services, Utility Division

Description/Justification:

The City of Falls Church is a wholesale customer of the Arlington Water Pollution Control Plant, along with Fairfax County and the City of Alexandria. Approximately 1/3 (400,000 gallons per average day) of the City's wastewater is discharged to Arlington County for treatment. Arlington is in the early stages of a ten-year capital improvement program to upgrade its wastewater facilities. The City is responsible for 2.67% of the costs based on its reserved capacity of 0.8 MGD at the plant.

In 2001, Arlington County developed a master plan for these improvements that considered the following major issues:

- Redundancy and capacity of the biological nutrient removal
- Wet weather treatment capacity
- Odor/aesthetics/security of the facility
- More stringent effluent limits
- Solids disposal
- Aging infrastructure

Arlington and the inter-jurisdictional partners have agreed that just over 80% of the costs are for upgrades and the rest of the project will be an increase in capacity, for which the City is not responsible. The upgrade part of the project cost is now estimated to be \$418,000,000, of which the City's share is 2.67 %. Therefore, the City's share is approximately \$11,165,000. Arlington received a grant from the Virginia Department of Environmental Quality (DEQ) of \$96,000,000. The City's share of the grant was \$2,565,000, which reduces the City's overall project cost to approximately \$8,600,000.

The City's sewer fund cannot support the cash flow requirements for funding its share of these improvements. During recent rate studies it was assumed that these expenses would be met by borrowing over a long term. Arlington has borrowed a substantial portion of its costs through a loan from the Virginia Revolving Loan Fund (VRLF), which is administered by the state Department of Environmental Quality (DEQ).

The City received a package of loans from DEQ in late FY2005 totaling \$3,275,000. It is the most cost-effective means to finance this work as it leverages the Commonwealth's AAA bond rating. The debt service for this loan over twenty years is \$222,174 per year.

The City intends to borrow additional funds, approximately \$4,250,000, in 2009 for the remaining cost of the project. The City's current sewer rate structure will not be sufficient to cover the new debt service.

Project Cost Estimate:

The total project cost estimate is provided by Arlington County.

Engineering and Design:

Construction: \$11,765,000

Total Project Cost (all years): \$11,765,000

Prior Appropriations: \$8,600,000 (without including \$2,565,000)

Unexpended Balance:

Future Funding Needs:

	<u>Prior Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source: Rev. Bonds	\$8,600,000	\$600,000	\$0	\$0	\$0	\$0	\$9,200,000
Funding Source: Grant	\$2,565,000	\$	\$	\$	\$	\$	\$2,565,000
Funding Source: Sewer Fund				\$	\$	\$	\$0
Total:	\$11,165,000	\$600,000	\$0	\$0	\$0	\$0	\$11,765,000

Project Schedule:

Engineering and Design:

Construction:

Impact on Operating Costs:

The impact on the sewer fund due to the original loan of \$3,275,000 was accounted for in the adopted rate structure. The City obtained an additional VRA loan of \$4,100,000 in 2009. The total projected cost to the City is estimated at approximately \$8,000,000. Sewer rates will likely need to be increased to fund the debt service.

Conformity with Comprehensive Plan and Council Strategic Plan:

The planned upgrade of the Arlington Wastewater Plant meets goals of the Comprehensive Plan's "Community Facilities, Public Utilities and Government Services" chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
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- Ensure the most efficient and effective management of sanitary sewer systems
- Explore new technology to update and operate the City's utilities system

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- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.

FY 2012–2016 CIP/COP Project – Falls Church Sewer Rehabilitation

CIP X COP _____

Department/Division: Environmental Services, Utility Division

Description/Justification:

A systematic approach to sewer line rehabilitation is being pursued throughout the City's sewer system. Based on consultant recommendations, a 30-year program has been developed. This is an on-going project to slip-line pipes with a process for reconstructing aged, damaged and deteriorated sewer lines. A new cured-in place pipe is formed inside of the existing sewer pipe by using water pressure to install a flexible tube saturated with a liquid thermosetting resin. The water is then heated to harden the resin. This process increases the sewer capacity (due to the smoothness of the new interior surface). It also results in a continuous, tight fitting, pipe-within-a-pipe and reduces infiltration and inflow (I&I). This is a relatively non-invasive and cost-effective process because there is little excavation required. This on-going project, begun in FY2004, will continue until the entire system is rehabilitated. Smoke testing and video inspection are performed to guide the decision process for selecting sewer mains for rehabilitation. In some cases a new sewer main may be a proposed solution to a localized capacity issue.

Project Cost Estimate:

The cost estimate is provided by Department staff, based on the actual cost of repair or lining performed in past years, and on the Sewer Fund's ability to support these repairs.

Engineering and Design: \$25,000
Construction: \$375,000
Total Project Cost (all years): \$400,000 (annually)

Prior Appropriations: \$2,800,000
Unexpended Balance:

Future Funding Needs:

	<u>Prior Appropriations</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Funding Source:	\$2,800,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$4,800,000
Funding Source:	\$	\$	\$	\$	\$	\$	\$
Funding Source:	\$	\$	\$	\$	\$	\$	\$

Total:	\$2,800,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$4,800,000
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Project Schedule:

Engineering and Design:	On-going
Construction:	On-going

Impact on Operating Costs:

The impact on the sewer reserve fund balance was offset by the programmed sewer rate increases enacted in 2003.

Conformity with Comprehensive Plan and Council Strategic Plan:

The continued needed maintenance of the sewer system meets goals of the Comprehensive Plan’s “Community Facilities, Public Utilities and Government Services” chapter such as:

- Ensure that a sufficient level of public facilities utilities services are available to meet the needs of the community
- Identify and prioritize facilities that require upgrading
- Ensure the most efficient and effective management of water systems
- Explore new technology to update and operate the City’s utilities system

This project supports the City Council Vision and Strategic Plan as stated in:

- Successful Development, Goal 3: Infrastructure that supports Citywide redevelopment that creates a vibrant, distinct, sustainable, great place.
- World Class Government and Public Outreach, Goal 5: High-Performing Water Utility - Maintain a high-performing Water and Sewer Utility that supports economic growth within its service territory in the County and City, and provides responsive customer service.